

## ABSTRACT

### A INFLUENCE OF SERUM LEPTIN OVER ASTHMA CONTROL AND ASTHMA RELATED QUALITY OF LIFE

**AUTHORS :** Dr.Anupama Murthy , Dr. G. Tharini , Dr.R.Karthikeyan

**INSTITUTION :** DEPARTMENT OF RESPIRATORY MEDICINE, PSG IMSR

#### BACKGROUND :

Serum leptin has been implicated in pathogenesis of asthma with contradicting results from various studies. We aimed at evaluating the influence of serum leptin on asthma control and quality of life among adults.

**Methods :** In all, 60 asthmatics were recruited prospectively and interviewed with Juniper's Asthma control questionnaire (ACQ) and Asthma specific quality of life questionnaire(AQLQ). Clinico demographic DATA were collected from all subjects who also underwent spirometry and estimation of leptin in fasting serum. A well controlled asthma was defined by > 1.5 score in ACQ.

**Results :** The study population had a mean age of 37.8 +15.3 years and BMI 24.04+4.16 Kgs/m<sup>2</sup>.Thirty five (58.3% ) subjects were females, Asthma was well controlled in 17(28.3%) subjects. Among the clinical and demographic characteristics of our subjects ,only the use of inhaled steroids at higher dose was associated with well controlled asthma (adjusted odds ratio 5.635(1.323 – 24.0);P =0.019.Serum leptin was not different between subjects with well controlled and uncontrolled asthma. 30.5 +21.8 ng/ml respectively; P >0.05,however serum leptin correlated modestly with BMI ( $r^2=0.302$ ,p=0.019),AQLQ total score (r=0.256;p=0.049)AQLQ activity domain (r = 0.274,p=0.034) and AQLQ symptom domain (r=0.253,p=0.05)

**CONCLUSION :** Serum leptin appears to have no association with asthma control in our small sample of adults. Its modest correlation with activity and symptom domains of quality of life warrants further investigation.